

# 1984 Subject Index

This index describes the material that appeared in Volume 80, Numbers 1 through 12, of *Chemical Engineering Progress*, which is published by the American Institute of Chemical Engineers.

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# 30,000 Expected at Petro Expo this Spring

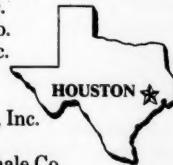
Nearly half the attendees will be either engineering and design personnel or R&D professionals.

More than 400 companies serving the chemical process industries will have their wares on display during AIChE's Petrochemical and Refining Exposition, which opens March 25 for four days at the Astrohall in Houston. An estimated 30,000 people, nearly half of whom will be either engineering and design or research and development professionals will be on hand to look over the new, sophisticated equipment on exhibit to see how it can streamline their processes and beef up their profit margins. If they find something they like, they'll be in a position to act; at the last Show approximately 84% of the attendees had the final say, specified and/or recommended at least one of the products they saw. In addition, most of those at Petro Expo '83 (94% actually) had not been called on by a salesperson from a given company during the previous year.

The exposition will not be the only attraction at the Astrohall, however. In conjunction with the Show, AIChE will hold its Spring National Meeting where hundreds of papers will be presented at more than 80 sessions. Among the wide range of topics to be considered are interfacial phenomena, advertising and promotion, glassy polymers, zero gravity processing, and plant retrofitting. For more information about the technical program see the Future Meetings Section of this issue.

On this and the next couple of pages are the names of the more than 400 companies that have signed up for Petro Expo. If your firm makes or does something of interest to the chemical process industries and has not reserved exhibit space, that can be remedied by contacting Adam Torres, Expositions Coordinator, AIChE, 345 E. 47 St., New York, N.Y. 10017. Tel. (212) 705-7752. Those interested in making arrangements to attend the Spring National Meeting should contact Don Nowak, AIChE Registration Manager, at (212) 705-7320.

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ADSCO Manufacturing Corp.  
AMF, Cuno General, General Filter Products Div.  
APS-Materials, Inc.  
ARI Industries, Inc.  
ARI Technologies, Inc.  
AWC, Inc.  
Abcor, Inc.  
Adalet-PLM Div.  
Aeration Industries  
Alemite Div./Stewart-Warner Corp.  
Louis Allis Co.  
Allweiler Pump, Inc.  
American Analog Co.  
American Institute of Chemical Engineers  
Amertap Corp.  
Amprodux  
Analytical Products Div./Sybron Corp.  
Anderson, Greenwood & Co.  
Applied Automation, Inc.  
Aqua-Dyne, Inc.  
AquaMatic, Inc.  
Armstrong Engineering Associates, Inc.  
Arrow Engineering, Inc.  
Artisan Industries, Inc.  
Astro Resources International Corp.  
August Systems, Inc.  
Automatic Switch Co.  
Automation Consultants, Inc.  
Axelson, Inc.  
BAC-Pritchard/Baltimore Aircoil Co., Inc.  
BS&B Safety Systems  
Badger Meter, Inc.  
Bailey Controls Co.  
Baker Perkins, Inc.  
Beta Products  
Bindicator Co.  
Bird Machine Co., Inc.  
Borg-Warner  
The Bowerston Shale Co.  
Bristol Babcock, Inc.  
Brookfield Engineering Laboratories, Inc.  
Brooks Instrument  
Bunnell Industries, Inc.  
Burgmann Seals America, Inc.  
Butler & Land, Inc.  
Butterworth Publishers  
*CPI Purchasing*  
Cabot Corp., Cabot Wrought Products Div. and KBI Div.  
Cal-Glass For Research, Inc.  
Canadian Consulate General  
Carter-Day Corp.  
Carver Pump Co.  
Chem Pruf Door Co., Inc.  
*Chemical Engineering*  
*Chemical Processing Magazine*  
Chemeer, Inc.  
Chemshare Corp.  
Chromalloy Compression & Measurement  
Clow Corp., Engineered Products Div.  
COADE, A division of International Thomson Information, Inc.



Coflexip & Services, Inc.  
 Collinsystems/Pro-Quip  
 Columbia Scientific Industries Corp.  
 Commercial Filters  
 Con-Serv, Inc.  
 Conax Buffalo Corp.  
 Conbraco Industries, Inc.  
 Construction Systems Associates  
 Continental Disc Corp.  
 Contour Publishing International,  
     Inc./CPI 100 Magazine  
 Control Components, Inc.  
 Control Engineering  
 Control Specialties, Inc.  
 Controls Southeast, Inc.  
 Cooper Valve Co.  
 Corken International  
 Coulter Electronics, Inc.  
 Crane Co.  
 John Crane-Houdaille, Inc.  
 Crawford Fitting Co.  
 Croll-Reynolds Engineering Co., Inc.  
 Crown Rotational Molded Products,  
     Inc.  
 G. W. Dahl Co., Inc.  
 Daniel Industries, Inc.  
 Delta Inert, Inc.  
 Deltech Engineering, Inc.  
 Detector Electronics Corp.  
 Deutsch Metal Components  
 DeZurik  
 Dixon Valve & Coupling Co.  
 Dollinger Corp.  
 Dorr-Oliver, Inc.  
 Dover Corp./Blackmer Pump Div.  
 Dover Corp./Norris Div.  
 Dover Corp./OPW Div. Fluid  
     Handling Group  
 Dover Corp./OPW Div. Process  
     Products Group & Loading Systems  
     Group  
 Dow Chemical USA  
 Doyle & Roth Manufacturing Co., Inc.  
 Dresser Industrial Valve Div.  
 Du Pont Co.  
 Du Pont Co., PPD  
 Durametallic Corp.  
 The Duriron Co., Inc.  
 Dynabrade, Inc.  
 Dynamics Products, Inc.  
 EG&G Rotron  
 EGC Corp.  
 EIM Co., Inc.  
 ETI Micro  
 Eagle Vehicles, Inc.  
 Eastech  
 Eastern Stainless Steel Co.  
 Eaton Corp./Dekorom Products  
     Samuel Moore Operations  
 Eden Equipment Co.  
 Edwards Engineering Corp.  
 Egglehof, Inc.  
 Eimco Molded Products Co.  
 El-O-Matic USA, Inc.  
 Electro-Coatings, Inc.  
 Elsevier Science Publishing Co.  
 Encyclopaedia Britannica USA  
 Engineering Micro-Simulations, Inc.



Engineering & Technological Services  
 Engineered Refrigeration Systems, Inc.,  
     Div. of Mobile Refrigeration Co.  
 ENRAF-Nonius  
 Enserch Engineers & Constructors  
 Envirogenics Systems Co.  
 John C. Ernst Co., Inc.  
 Eur-Controls, Inc.  
 FES, Inc.  
 FMC, Turbo Div.  
 Fairchild Industrial Products Co.  
 Fauske & Associates, Inc.  
 Fike Metal Products Corp.  
 Fil-Clean Corp.  
 Filter Specialists, Inc.  
 Filters, Inc.  
 Filterite/Fluid Dynamics Membrane/  
     Brunswick Technetics Div.  
 Fischer & Porter Co.  
 Fisher Controls International  
 Flo-Couplings, Inc.  
 Fluid Data, Inc.  
 Fox Valve Development  
 The Foxboro Co.  
 Fram Industrial Filter  
 Francovalves Casting, Inc.  
 Fybroc Div., Met-Pro Corp.  
 GAI-Tronics Corp.  
 GCA/Precision Scientific  
 GPE Controls  
 G. T. Instrument, Ltd. Galtek Corp.  
 Galveston-Houston Co.  
 Garlock Inc., Valves & Industrial  
     Plastics  
 Garlock Mechanical Packing Div.  
 Gas Equipment Co.  
 Gaston County Fabrication  
 Gaumer Co., Inc.  
 Gay Engineering & Sales Co., Inc.  
 Gemoco Div., Chromalloy American  
     Corp.  
 Glidden Paint  
 Glo-Quartz Electric Heater Co., Inc.  
 Global Heat Exchanger, Inc.  
 Claud S. Gordon Co.  
 Gordon Publications, Inc.  
 W.L. Gore & Associates, Inc. Coatings  
     Div.  
 W.L. Gore & Associates  
 Gorman-Rupp Co.  
 Gould, Inc.  
 Goulds Pumps, Inc.  
 Government of Ontario, Ministry of  
     Industry & Trade  
 Graham Mfg. Co., Inc.  
 Great Lakes Instruments, Inc.  
 A. P. Green Refractories Co.  
 Groth Equipment Corp.  
 Gulf Publishing Co.  
 Gustafson, Inc.  
 HR Textron  
 Halphen Engineering, Inc.  
 Hammel Dahl  
 Haskel, Inc.  
 Hatfield & Co., Inc.  
 Hayward Industrial Products, Inc.  
 Helicoid Div. Bristol Babcock  
 Hercules, Inc.  
 Hersey Products, Inc.  
 The Hilliard Corp.

Hitachi Metals America  
 HiTech Interactive Training, Inc.  
 Hoffman Air & Filtration Systems  
 Hoke, Inc.  
 Hoover Universal, Materials Handling  
     Div.  
 Horiba Instruments  
 Howe-Baker Engineers, Inc.  
 Hudson Products Corp.  
 Hydrodynamics Corp.  
 Hydroflo Corp.  
 Hyprotech, Ltd.  
 Hyspan Precision Products, Inc.  
 Hytrex Cartridge Filter Div.,  
     Osmonics Inc.  
 IBM Corp.  
 ITT Barton Instruments  
 ITT General Controls  
 ITT Grinnell Valve Co., Inc.  
 Icarus Corp.



Astrodomes - Astrohall

Industrial Filter & Pump Mfg., Co.  
 Inficon-Leybold-Heraeus  
 Ingersoll-Rand Co.  
 Inpro/Seal, Inc.  
 Institution of Chemical Engineers  
 Insulation Technology, Inc.  
 Intergraph Corp.  
 International Chempack Corp.  
 International Piping Systems, Ltd.  
 Intersystems Industrial Products  
 Iscotx, Inc.  
 Italian Trade Commission  
 Jacoby-Tarbox International  
 Jamesbury Corp.  
 Jerguson Gage & Valve Co.  
 Jogler, Inc.  
 Johnson Div., UOP, Inc.  
 K-Tron  
 KTM Industries, Inc.  
 Kamry-Neles, Inc.  
 Kay-Ray, Inc.  
 Kenco Engineering Co.  
 Keystone Valve USA  
 Koch Engineering Co., Inc.  
 Koch Filter Corp.  
 Komax Systems, Inc.  
 Krebs Engineers  
 Kurz Instruments, Inc.  
 LTV Energy Products Co.  
 Lamson Corp.  
 R. G. Laurence Co., Inc.  
 Liquid Controls Corp.  
 Lubrication Systems Co.  
 Lutz Pumps, Inc.  
 Luwa Corp.  
 McCarthy Robinson, Inc.  
 McCrometer/Div. of Ametek, Inc.  
 McDaniel Controls  
 McTighe Industries, Inc.  
 Major Controls, Inc.  
 Mamac Systems  
 Marathon Electric Mfg. Corp.  
 Marcel Dekker, Inc.

Maroco, Inc.  
 March Instrument Co., A Unit of  
     General Signal  
 Masoneilan  
 Max Meter Div., Max Machinery, Inc.  
 Mercoid Corp.  
 Michigan Dynamics, Inc.  
 Micro Motion, Inc.  
 Mid-West Instrument  
 Franklin Miller, Inc.  
 Mission Drilling Products Div., TRW,  
     Inc.  
 Mixing Equipment Co.  
 Moisture Systems Corp.  
 Molnlycke, Inc., Industrial Div.  
 Molytek, Inc.  
 Monsanto Co.  
 Moran Furnace & Sheet Metal Co.  
 Morton Thiokol, Inc./Ventron Div.  
 Paul Mueller Co.  
 Multi-Flux, Inc.  
 The Nash Engineering Co.  
 Newmans, Inc.  
 Newport Scientific, Inc.  
 Nibco, Inc.  
 Nichols/Zenith  
 Nicholson Div., Datron Systems, Inc.  
 Norton Co.  
 O-I/Schott Process Systems, Inc.  
 O. H. Materials Co.  
 Oil Skimmers, Inc.  
 Oilwell Div./U.S. Steel Corp.  
 Olympus Corp.-Industrial Fiberoptics  
     Dept.  
 Omnidata International  
 Orbit Valve Co.  
 Oregon Metallurgical Corp.  
 Oseco, Inc.  
 PPG Industries, Inc. (Pittsburgh  
     Paint)  
 Pacific Pumps Div., Dresser  
     Industries  
 Pall Process Filtration Corp.  
 Pan Tech Engineering Corp.  
 Patterson-Kelley Co. Div., HARSCO  
     Corp.  
 Peabody-Doré Corp.  
 Penberthy Div.  
 Pennwalt Corp.  
 Pennwell Publishing Co.  
 Pergamon Press, Inc.  
 Perkin-Elmer  
 Perry Equipment Corp.  
 The Pfaudler Co., A Sohio Co.  
 The Pipe Line Development Co.  
     (PLIDCO)  
 Pittsburgh Corning Corp.  
 Plant Engineering Magazine,  
     Technical Publishing Co.  
 Plast-O-Matic Valves, Inc.  
 Plastic Omnium, Inc.  
 Plumey Co.  
 Pollution Equipment News/Rimbach  
     Publishing Inc.  
 Polymer Piping & Materials  
 Posacon  
 Posi-Seal International, Inc.  
 Powell Process Systems  
 Power Packing Co., Inc.

Prime Computer  
 Pro-Quip/Letlow & Associates  
 Process Strainers, Inc.  
 Proco Products, Inc.  
 The Protectoseal Co.  
 Proximity Controls, Inc., AB-CO  
     Controls, Inc.  
 Publishers For Conventions, Inc.  
 Puffer-Sweiven, Inc.  
 Pyrotex USA, Inc.  
 Raco Industrial Products, Inc.  
 Ramco Mfg. Co.  
 Reflange, Inc.  
 Refrigeration Engineering Corp.  
 Reliance Electric  
 Resistoflex Co.  
 Rexnord Gas Detection Products  
 Richards Industries, Inc.  
 Rochester Instrument Systems  
 Rockwell International-Flow Control  
     Div.  
 Rohrback Instruments  
 Ronan Engineering Co.  
 Ronningen Petter Div., Dover Corp.  
 Roper Pump Co.  
 Rosedale Products  
 Rosemount, Inc.  
 Rosenblad Corp.  
 Roth Pump Co.  
 SCA Chemical Services, Inc.  
 SOR, Inc.  
 Sahara Air Dryers  
 Sandmeyer Steel Co.  
 Sandvik Process Systems, Inc.  
 Saunders Valve, Inc.  
 Scanivalve, Inc.  
 Scientific Gas Products  
 Serfilco, Ltd.  
 Siemens-Allis  
 Sihl Pumps, Inc.  
 Simulation Sciences, Inc.  
 The Singer Co., Link Simulation  
     Systems Div.  
 Skinner Engine Co.  
 Slauterback Corp.  
 Howard Screen Smith Co.  
 The Meyer F. Smith Co.  
 Smithco Industrial Safety Div.  
 Sparkler Filters, Inc.  
 The Spencer Turbine Co.  
 Spirax Sarco, Inc.  
 Spraying Systems Co.  
 Standard Fittings Co.  
 Stockham Valves & Fittings  
 Ralph Stockton Valve  
 Strahman Valves, Inc.  
 Strainers, Inc.  
 Sturm Machine Co., Inc.  
 Sullair  
 Sundstrand Fluid Handling  
 Superior Energies, Inc.  
 Sweco Tube Corp.  
 TBV, Inc.  
 TRW Bearings Div.  
 Taylor Tools  
 Tech Fab  
 Teledyne Wah Chang Albany

Tescom Corp.  
 Texas Analytical Products  
 Texas Instrument  
 Texas Nuclear  
 Texas Process Equipment Co.  
 Texas Technical Products Co.  
 Thermetrics-Maveric  
 Thermo-Couple Products Co., Inc.  
 Thermo Electric  
 Thermoelectron Corp.  
 Thermon Manufacturing Co.  
 Timet  
 TiTech International, Inc.  
 Titeflex Corp.  
 Tokheim Corp., Meter Div.  
 Tracor Atlas, Inc.  
 Transamerica DeLaval, Inc.  
 Trent Tube Div., Colt Industries  
 Tubesales  
 U. E. Systems, Inc.  
 U. S. Department of Labor-OSHA  
 U.S. Filter  
 U. S. Riley Corp./Panalarm Corp.  
 Union Carbide Industrial Services Co.  
 Union Carbide Corp., Linde Div.  
 Union Carbide Process Systems &  
     Services  
 Unit Instruments, Inc.  
 Utex Industries, Inc.  
 Vac Systems  
 Vacco Industries  
 Van Leeuwen Pipe  
     and Tube Corp.  
 Van London Co., Inc.  
 Velan Valve Corp.  
 Viking Pumps Div.  
 Vilter Manufacturing Corp.  
 Vooner Equipment Co., Inc.  
 W-K-M Div., ACF Mfg., Co.  
 E. H. Wachs Co.  
 The Walworth Co.  
 Warminster Fiberglass, Subsidiary of  
     Fischer & Porter Co.  
 Warren Pumps Div., Houdaille  
     Industries, Inc.  
 Warren Rupp Div.  
 Water Services of America, Inc.  
 Watts Regulator Co.  
 Waukesha Foundry Div., Abex Corp.  
 Wesco Screen Co.  
 Westinghouse Electric Corp.  
 Wheeler Pilot International  
 Edwin L. Wiegand Div., Emerson  
     Electric Co.  
 Wilden Pump & Engineering Co.  
 T. D. Williamson, Inc.  
 T. D. Wood's Sons Co.  
 Worcester Controls  
 Wright-Austin  
 Xomox Corp.  
 Yellow Springs Instrument Co., Inc.  
 Otto H. York Co., Inc.  
 Zidell Explorations, Inc.  
 Zook Enterprises, Inc.  
 Zurn Industries, Inc., General Air Div.

